

# DELL EMC POWEREDGE PORTFOLIO: PLATFORMS AND SOLUTIONS FOR ENTERPRISE APPLICATIONS

As the foundation for a complete, adaptive IT solution, PowerEdge servers deliver superior agility and reliability, outstanding operational efficiencies and top performance at any scale. With its latest generation of PowerEdge servers, Dell EMC makes server innovations more affordable and accessible, putting more power into the hands of more people than ever before.



## Next-generation PowerEdge server technologies

## Future-ready PowerEdge solutions for any size enterprise

### Application environments

- Unified communications and collaboration
- Business processing and decision support
- High-performance computing
- Virtualization and cloud computing

### PowerEdge platforms: traditional infrastructure

- PowerEdge rack servers
- PowerEdge tower servers

### PowerEdge platforms: modular infrastructure

- PowerEdge FX server nodes
- PowerEdge VRTX
- PowerEdge blade servers
- PowerEdge C series

### Dell EMC comprehensive enterprise solutions portfolio

# NEXT-GENERATION POWEREDGE SERVER TECHNOLOGIES

The 13th generation of PowerEdge servers represents our most advanced lineup of rack, tower and modular infrastructure platforms and is designed for the widest range of web, enterprise and hyperscale applications. Delivering new levels of flexibility, efficiency and performance, these systems allow IT organizations to:

## Build a scalable, adaptable infrastructure

The flexible, adaptable portfolio of PowerEdge servers can be used as modular building blocks to create an agile, future-ready infrastructure, from the remote office to a large-scale data center.

## Manage from anywhere with more automation and new access options

Our OpenManage portfolio of systems management tools continues to make enterprise management easier and more efficient with increased automation, simpler tools and mobile device access.

## Increase application performance with scalable, efficient in-server storage

Versatile, powerful in-server storage allows you to accelerate performance of targeted applications with flexible configurations designed to maximize your data center efficiency.



### PowerEdge servers: the industry's latest technologies combined with Dell EMC innovations

- **More processing power** — Latest-generation Intel® Xeon® processors boost virtualized environments and performance-hungry business applications.
- **High-capacity, low-power memory** — DDR4 memory accelerates workloads like enterprise resource planning and database applications.
- **Scalable, efficient local storage** — Wide range of in-server storage options enables all-flash configurations, in-box hybrid tiered solutions, low-cost dense capacity platforms, and matching server-based storage with application requirements for best performance and value.
- **Simplified, intelligent management** — OpenManage tools accelerate time-to-production with enhanced local access, new mobile devices for secure monitoring of the data center from your handheld device and new automated processes to save time and costs spent on daily tasks.
- **Energy efficiency** — Innovative power and cooling technologies such as Fresh Air 2.0 allow data centers to run at constant temperatures of up to 40°C/104°F, reducing cooling demands and enabling significant operational cost savings.

# FUTURE-READY POWEREDGE SOLUTIONS FOR ANY SIZE ENTERPRISE

Today's application and end-user demands drive many businesses to seek the performance and efficiency benefits typically delivered by hyperscale solutions. IT managers are looking for consistent, stable architectures and scalable server platforms optimized for their specific applications. But many customers don't find these solutions affordable or accessible and continue to look for flexible designs that can help advance their business.

## Applying efficiencies of hyperscale business to general-purpose computing

Dell EMC brings learned efficiencies from our industry-leading hyperscale business into the general-purpose computing of data centers and office IT environments. PowerEdge servers deliver performance and flexibility with unmatched systems management and versatile onboard storage configurations optimized for key enterprise applications.

## Portfolio optimized for key applications

From general-purpose to distributed applications, the PowerEdge server portfolio offers choices for any size enterprise. As applications drive infrastructure design, PowerEdge servers fulfill the needs of various IT environments with a range of offerings designed for efficiency, simplicity and performance.



### Key application environments

#### Unified communications and collaboration (UC&C)

Empower users to be more productive and engaged while lowering communications costs. With large memory, high bandwidth and flexible local storage options, PowerEdge servers enable business continuity, performance and quality of experience for enterprise telephony, messaging, conferencing and collaborative applications.

#### Business processing and decision support

Accelerate performance and improve the reliability of your business-critical applications with a range of platforms that enable IT to support data-intensive applications, including decision support, analytics, enterprise resource planning (ERP) and customer relationship management (CRM).

#### High-performance computing (HPC)

Deliver faster and more predictable results to compute-intensive applications that rely on HPC cluster performance, whether for scientific research, financial markets or commercial big data. With latest-generation processors, higher I/O, more GPU options and ultra-dense designs, PowerEdge servers support a broad range of technical computing needs.

#### Virtualization and cloud computing

Optimize your virtualization and cloud environments for improved VM density, streamlined management and enhanced performance. In-server hybrid storage and increased networking bandwidth provide a scalable, software-defined virtual storage platform.

# UNIFIED COMMUNICATIONS AND COLLABORATION

## DELL EMC SOLUTIONS FOR MICROSOFT EXCHANGE

### Enhanced messaging, calendar and contacts

Microsoft® Exchange 2013 and the Microsoft Outlook® 2013 client are key elements of the industry's most comprehensive UC&C solution. Together, they enable email, calendar, contacts and voicemail on a wide range of phones, tablets, notebooks and desktop devices with enhanced security for mobility initiatives.

### Application requirements

While Exchange has evolved to enable very large mailboxes, many legacy deployments are not capable of handling the demands placed on processor, network and storage systems. Modern Exchange environments require in-memory cache for faster response times, flexible memory capacities for a range of implementations and a streamlined architecture to support Microsoft's managed availability strategy. Access to large local storage delivers capacity and performance advantages.

### PowerEdge servers for Microsoft Exchange

Email volume and security threats are stretching older infrastructures to the limit. Organizations are at risk of losing business continuity, data and reputation, especially if running older versions of Exchange. Designed to tackle storage capacity and performance challenges associated with today's email, PowerEdge servers can provide more, larger and better performing mailboxes on a single server, enabling:

- Reduced time managing small mailboxes
- Faster response times
- Greater capacity for archiving, data protection and enterprise search
- Non-disruptive scalability with high-capacity internal storage
- High availability and greater uptime with combined server/storage components
- Improved availability and responsiveness with agent-free, automated and embedded systems management that can monitor performance of the most critical components as well as overall system performance

### Ideal for single server or clustered Exchange environments

For Exchange environments that utilize local storage, the PowerEdge R730xd delivers massive internal storage capacity in just 2U of rack space. Combined with DAS storage arrays, the R730xd can offer even more mailbox capacity to deliver the most economical solution for Exchange deployments.

R730xd



### Ideal for shared storage

Modular infrastructure servers, like the FC630, M630, rack-optimized 1U R630 or 2U R730, provide the performance, memory density, flexible I/O and networking options that shared-storage Exchange environments demand. When combined with Fibre Channel or iSCSI SAN arrays, these systems deliver the response times and scalability required for large-scale communications infrastructures.

R730



FC630



R630



M630



### Ideal for remote and small offices

Designed for single-server small and medium-sized businesses, the T630 tower server delivers storage scalability and performance for growing Exchange environments. For multiple server environments, the PowerEdge VRTX shared infrastructure platform with up to four M630 or two M830 server nodes and extensive internal storage capacity delivers data center capabilities with ease and automation for remote and branch offices.

T630



VRTX



# UNIFIED COMMUNICATIONS AND COLLABORATION

## DELL EMC SOLUTIONS FOR SKYPE FOR BUSINESS

### Real-time communications

Instant messaging, presence awareness, audio and video conferencing, mobility support and enterprise voice are unified in Skype® for Business so that your users can instantly and intuitively engage others to solve a problem or act on an opportunity. Combined in a comprehensive UC&C solution with Microsoft Exchange and Microsoft® SharePoint®, Skype for Business can empower your workers to achieve faster, better outcomes.

### Application requirements

The shift to a more mobile and dispersed workforce using latency-sensitive enterprise voice and video conferencing means that many existing infrastructures may need performance, memory and throughput boosts to avert quality problems for users. The often virtualized Skype for Business environments require high floating point operations for CPU throughput, high bandwidth for memory load transfers and high compute power for adding concurrent users without performance degradation.

### PowerEdge servers for Skype for Business

Next-generation PowerEdge servers offer up to 24 cores per processor, higher memory bandwidth and modular network options to provide:

- Increased hardware consolidation and related IT efficiencies
- More concurrent users
- Higher performance and lower latency for a better quality experience in realtime communications
- Network interface options to eliminate unnecessary “forklift” upgrades
- Future-ready scalability to add users and features such as enterprise voice
- Improved availability and responsiveness with agent-free, automated, embedded systems management that monitors performance of the most critical application components as well as overall system performance

### Recommended for Skype for Business shared database

The PowerEdge R730 is an excellent platform for Skype for Business backend infrastructure roles where high availability is crucial, such as phone and messaging databases. The R730 offers scalable memory density, expanded I/O and the raw performance required to support peak transaction loads.

R730



### Ideal for front-end, edge or mediation

PowerEdge 2-socket servers — the R730, FC630, R630 and M630 — are well suited for A/V conferencing due to large memory capacity and excellent I/O bandwidth. These servers provide highly scalable features to support peak demand requests and routing to databases.

R730



FC630



R630



M1000e with M630

### Recommended for small or remote offices

Designed for small and medium-size businesses, as well as data centers, the PowerEdge T630 rackable tower server delivers scalability and performance for A/V conferencing and other Skype for Business roles in a virtualized environment. For large offices or branch offices, PowerEdge VRTX supports the 2-socket M630 front-end, edge or mediation roles as well as 4-socket M830 backend database roles.

T630



VRTX



# UNIFIED COMMUNICATIONS AND COLLABORATION

## DELL EMC SOLUTIONS FOR MICROSOFT SHAREPOINT

### Collaboration, workflows and content management

Microsoft SharePoint provides unparalleled versatility as a framework for content collaboration, intranet portal and internet site creation, document management, business workflows and more. With SharePoint 2013, new social features build communities and deliver content and notifications based on user interest, while the enterprise search function across SharePoint, Skype for Business and Exchange helps find information quickly. Integrated archiving and eDiscovery preserve data in-place across all platforms to help solve growing governance and compliance demands.

### Application requirements

From web serving to managing rapidly expanding data stores, older infrastructures may not be able to deliver the response times, storage capacity and high availability needed to support websites, business processing, content management and data management. SharePoint servers are often virtualized, so scalable memory and flexible I/O options to better support network and especially storage traffic are critical.

### PowerEdge servers for Microsoft SharePoint

Processing power to support more VMs and transactions, memory density and scalability, local storage capacity, tiered storage and networking choices make the next generation of PowerEdge servers ideal for the wide range of SharePoint uses, delivering:

- Faster response times
- More concurrent users
- Improved throughput for Microsoft SQL Server® backend access
- Flexibility and scalability to support new uses
- Agent-free, automated embedded management that consumes no processor overhead, eliminating negative impact on application performance

### Recommended for consolidated SharePoint deployments

Dell EMC offers many 2- and 4-socket platforms suitable for consolidated enterprise SharePoint deployments, supporting web, application and SQL database servers that make up the multi-tier architecture. In any consolidated SharePoint environment, availability and application performance are key. SharePoint application and web tier servers can be demanding, and PowerEdge R730, R630, FC630 and M630 deliver the best-in-class performance and reliability that you demand to ensure your environment offers the availability and responsiveness required for effective collaboration.

R730



R630



FC630



M630



### Recommended for the largest SharePoint deployments

If greater virtual scalability or dedicated database servers are needed for the largest deployments, PowerEdge M830 and R930 4-socket servers have the memory expandability and I/O flexibility to run the backend database or consolidate even the most taxing server roles.

R930



R930



# BUSINESS PROCESSING AND DECISION SUPPORT

## DELL EMC SOLUTIONS FOR DATABASE, CRM AND ERP

### Business-critical, data-intensive applications

Businesses today increasingly rely on highly demanding, performance-hungry applications to deliver the information their customers and stakeholders demand. Business-critical, data-intensive applications such as ERP, CRM, analytics and collaborative decision support demand the highest levels of performance as these systems become core to the company's mission. To run these critical applications, enterprises are looking for an IT infrastructure that can handle growing, variable transaction volumes, can store massive amounts of data on scalable and cost-efficient storage, and can easily add new users while processing more transactions with lower latency.

### Oracle, Microsoft and SAP application requirements

The next generation of PowerEdge servers have been optimized for business computing and decision support applications based on Oracle®, Microsoft SQL Server, SAP® HANA or SAP ASE databases with enhanced in-server flash storage, a larger memory footprint, and greater memory bandwidth to deliver more OLTP or OLAP database transactions in less time for a greater number of concurrent users, with streamlined, more automated management.

### PowerEdge servers for business computing

Analytical and transactional processing power, memory density and scalability and massive local storage capacity including flash storage make the next generation PowerEdge servers ideal for the wide range of database, data warehouse and business processing applications, delivering:

- Faster average transaction response times
- More concurrent users with higher number of transactions
- Improved throughput for data analysis applications
- Streamlined systems management
- Built-in reliability and high availability
- Easy scalability as data needs increase
- Improved availability and responsiveness with agent-free, automated systems management that can monitor the performance of the most critical server components, as well as overall system performance

### Recommended for core data center infrastructure

PowerEdge 4-socket servers represent the cutting-edge of business processing applications to handle your most critical data — from the expandability and reliability of the PowerEdge R930, to the density and modularity of the 1U FC830 or M830. Achieve additional acceleration of OLAP with SanDisk DAS Cache for local or DAS storage.

R930



FC830



M830



### Ideal for midrange environments

PowerEdge 2-socket servers are nearly as capable as the 4-socket lineup. The PowerEdge R730, R630, FC630 and M630 deliver performance and memory density well suited for clustered database environments, such as Oracle® Real Application Clusters (Oracle RAC), while the R730xd, with its large internal storage capacity, is the perfect choice for a self-contained database server.

R730



FC630



M630



R730xd



R630



### Ideal for remote or small offices

With massive shared storage, a large amount of flash and support for M630 and M830 compute nodes, PowerEdge VRTX drives all classes of applications from front-end web tech to backend database.

For single-server deployments, the T630 delivers the performance and capacity needed to drive your business forward.

VRTX



T630



# HIGH-PERFORMANCE COMPUTING

## DELL EMC SOLUTIONS FOR TECHNICAL AND RESEARCH COMPUTING

### Performance needed for compute-intensive environments

High-performance computing (HPC) is at the cutting edge of industry and academia, and the capabilities of HPC clusters are critical to the success of compute-intensive applications such as scientific research, commercial big data, medical imaging, financial trading, oil and gas exploration or data warehousing.

### Application requirements

Requirements vary for specific workloads: head node servers, which manage the compute nodes in the cluster, require I/O flexibility for external storage options, ability to connect to multiple networks (private, enterprise and application networks) and HA reliability; compute nodes require high I/O to storage, memory density to support caching and minimize I/O, high performance processors and RAS features. For design applications that involve renderings and modelling, accelerators are critical.

### PowerEdge servers for high-performance computing

PowerEdge servers deliver outstanding performance to compute-intensive HPC environments. With the latest generation of Intel processors, more GPU and internal solid-state storage options and ultra-dense designs, these servers readily support a variety of technical computing workloads, enabling:

- Double the number of floating point operations per cycle
- Faster movement of data in and out of memory
- Faster storage access for reduced latency
- Expanded accelerator options with Intel Xeon Phi™, NVIDIA® Tesla® and AMD® FirePro™
- Agent-free, automated embedded management that consumes no processor overhead, eliminating negative impact on application performance
- Enhanced management for Linux users with the OpenManage Nagios® plug-in

### Purpose-built for HPC

Demanding workloads require flexible and efficient solutions built to meet your specific needs. The PowerEdge C6320 is purpose-designed for the most demanding HPC, data analytics and cloud-building use cases.

PowerEdge C4130 delivers HPC results faster with up to four 300W PCIe accelerators coupled with up to two Intel Xeon E5-2600 v4 processors for industry-leading density and supercomputing agility with a uniquely balanced architecture.

### Ideal for midrange environments

The 2-socket, 2U R730 or 1U R630 servers are ideal for managing the entire cluster thanks to a very high processor core count, high availability, flexible, low-latency I/O options and robust peripheral support with PCIe expansion slots. These nodes can also be effectively used as login nodes and storage gateways, which can utilize SanDisk DAS Cache for even greater storage performance.

### Recommended for compute nodes

For the greatest levels of density, the 1U 2-socket R630 is a great building block for commercial HPC deployments due to its compute density, large memory footprint, RAS features and SSD support. The 2U R730 provides broad support for acceleration technology, expandability with PCIe slots, large compute, power and memory, and fast storage.

The FC430 is a modular way to add high-density compute to a data center, with eight quarter-width 2-socket servers in a 2U chassis, or in combination with FD332 DAS storage blocks. The FC830 also has a low-latency InfiniBand option.

For supercomputing centers that prefer the ultra-efficient converged infrastructure of blade servers, the M630 delivers high memory and flexible I/O combined with power and cooling and management efficiencies.

C6320



C4130



R730



R630



R630



R730



FX2 with FC430



M1000e with M630



# VIRTUALIZATION AND CLOUD COMPUTING

## DELL EMC SOLUTIONS FOR INFRASTRUCTURE OPTIMIZATION

### Large-scale benefits of virtualization

From a few virtual machines running on a single physical computer to a whole server farm across multiple root servers, virtualization optimizes investments in hardware and network infrastructure by reducing server sprawl. Virtualization helps you realize large-scale benefits such as improved utilization, optimized support resources, reduced floor space and power costs, along with providing a robust infrastructure that can deliver greater availability and resiliency.

### Application requirements

Workloads such as desktop virtualization or private cloud rely on efficient and high-performance IT infrastructures. In VDI deployments, consolidation, density and performance are critical. Virtualization platforms must deliver performance with high core counts, substantial memory density, and flexible I/O to be able to assign appropriate levels of system resources to VMs.

### PowerEdge servers for virtualized environments

PowerEdge servers deliver outstanding performance to virtualized environments with up to 24 processing cores per socket, high memory densities and flexible I/O, enabling:

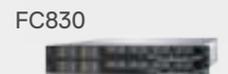
- Non-disruptive scalability
- Better support for graphics-intensive applications in VDI
- More VMs per server
- Flexible allocation of resources among VMs with switch independent partitioning technology
- Full support and compatibility with the virtual storage solutions such as VMware® Virtual SAN™ and Microsoft Storage Spaces.
- Maximized application uptime with automatic failover of redundant hypervisors and failsafe memory fault isolation
- Streamlined management and control with OpenManage Integration Suite for Microsoft System Center and OpenManage Integration for VMware vCenter™ virtualization consoles

### Recommended for virtual and private cloud data

For large-scale virtualization that demands the highest performance and density of VMs per computation node, the 4-socket R930 and FC830 are the best choices. Ideal for random I/O workloads, the R930 delivers unmatched I/O performance and throughput for mission-critical applications and the 1U FC830 doubles the density.

For space-constrained environments, the ultra-dense 1U, 2-socket R630 can deliver high memory and extreme I/O performance with all-flash configurations in half the space of comparable servers. The FC630 offers a denser footprint with greater infrastructure flexibility.

The M1000e blade server solution is available for enterprises looking for converged infrastructure efficiency and power and cooling costs savings.



M1000e with M630



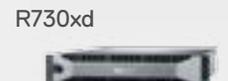
### Recommended for server and desktop virtualization

With up to 3TB of memory and I/O optimized for virtual desktop infrastructure, the R730 delivers optimal VDI scalability. Expanded GPU options support graphics-intensive VDI implementations, such as CAD/CAM, for better performance. When populated with PowerEdge M630 or M830 blade nodes, PowerEdge VRTX becomes a versatile and powerful platform for server or desktop virtualization. The FC630 is also a proven choice for virtual desktop environments.



### Recommended for virtual software-defined storage

Compatible with software-defined storage solutions, such as Microsoft Storage Spaces, VMware Virtual SAN or OpenStack™ Ceph, this server is a great virtualized storage platform. When combined with DAS storage arrays, it can create an even larger pool of cost-efficient virtualized storage.



# POWEREDGE RACK AND TOWER SERVERS

## POWEREDGE RACK SERVERS

Performance, availability and density with rack-optimized designs for mid-sized and larger businesses



A complete portfolio of 1-, 2- and 4-socket rack servers designed to reduce complexity in building and managing a data center. PowerEdge rack servers deliver excellent performance and functionality, and outstanding reliability while ensuring superior customer value.

## POWEREDGE TOWER SERVERS

Excellent performance, extensive capacity for growth, and simplified management



A portfolio of 1- and 2-socket tower servers that delivers powerful performance, extensive expandability and reliability, helping users to drive business success.

# POWEREDGE RACK SERVERS

Platform	Description	Processor(s)	Memory	PCI slots	Communications	Hard drives
<b>R930</b> 	Compute-intensive 4U, 4-socket rack server designed for demanding enterprise applications and features industry-leading internal storage and memory scalability to optimize application performance.	Intel Xeon processor E7-4800 v4, E7-8800 v4 product family; up to 24 cores per socket	Up to 96 DDR4 DIMMs Up to 2400MT/s	10 PCIe 3.0	4 x 1GbE 2 x 10GbE	<ul style="list-style-type: none"> <li>Up to 24 x 2.5" HDDs, hot-plug 12Gb/6Gb SAS HDD or SAS/SATA SSD</li> <li>Up to 8 Express Flash NVMe PCIe SSDs</li> </ul>
<b>R830</b> 	High-performance, 2U, 4-socket rack server designed for dense virtualization and scalable database applications.	Intel Xeon processor E5-4600 v4 product family; up to 22 cores per socket	Up to 48 DIMMs Up to 2400MT/s	7 PCIe 3.0	4 x 1GbE 2 x 10GbE	<ul style="list-style-type: none"> <li>Up to 16 x 2.5" SATA/SAS SSD, SAS HDD, nearline SAS HDD</li> </ul>
<b>R730xd</b> 	A performance 2U, 2-socket rack server that offers highly dense, flexible storage options – including in-box tiering and a massive internal storage capacity designed for future scale out.	Intel Xeon processor E5-2600 v4 product family; up to 22 cores per socket	Up to 24 DDR4 DIMMs Up to 2400MT/s	6 PCIe 3.0	4 x 1GbE 2 x 10GbE	<ul style="list-style-type: none"> <li>18 x 1.8" + 8 x 3.5" + 2 x 2.5" (back)</li> <li>24 x 2.5" HDD + 2 x 2.5" (back)</li> <li>24 x 2.5" HDD</li> <li>12 x 3.5" HDD + 4 x 3.5" (internal) + 2 x 2.5" (back)</li> <li>12 x 3.5" HDD + 2 x 2.5" (back)</li> <li>12 x 3.5" HDD</li> <li>Up to 4 NVMe</li> </ul>
<b>R730</b> 	A performance 2U, 2-socket rack server delivers tremendous functional flexibility with a combination of compute power, large memory and very fast storage.	Intel Xeon processor E5-2600 v4 product family; up to 22 cores per socket	Up to 24 DDR4 DIMMs Up to 2400MT/s	7 PCIe 3.0	4 x 1GbE 2 x 10GbE	<ul style="list-style-type: none"> <li>Up to 16 x 2.5" HDDs</li> <li>Up to 8 x 3.5" HDDs</li> <li>Up to 2 optional GPU accelerators</li> </ul>

# POWEREDGE RACK SERVERS

Platform	Description	Processor(s)	Memory	PCI slots	Embedded NICs	Hard drives
<b>R630</b> 	A performance 1U, 2-socket rack server that delivers incredible density across a range of resources enabling highly flexible data center scaling.	Intel Xeon processor E5-2600 v4 product family; up to 22 cores per socket	Up to 24 DDR4 DIMMs Up to 2400MT/s	3 PCIe 3.0	4 x 1GbE 2 x 10GbE	<ul style="list-style-type: none"> <li>Up to 24 x 1.8" HDDs or 10 x 2.5" HDDs or 8 x 2.5" HDDs</li> <li>Up to 4 NVMe Express Flash PCIe SSDs</li> </ul>
<b>R530</b> 	Powerful 2U, 2-socket rack server designed for core medium business databases and applications, and for consolidation and virtualization.	Intel Xeon processor E5-2600 v4 product family; up to 18 cores per socket	Up to 12 DDR4 DIMMs Up to 2400MT/s	5 PCIe slots, including 3 PCIe 3.0	1 dual-port 1GbE NIC	<ul style="list-style-type: none"> <li>Up to 8 x 3.5" HDDs</li> </ul>
<b>R430</b> 	1U, 2-socket rack server delivers performance, density and internal expandability for customized workloads.	Intel Xeon processor E5-2600 v4 product family; up to 20 cores per socket	Up to 12 DDR4 DIMMs Up to 2400MT/s	2 PCIe 3.0	4 x 1GbE LOM	<ul style="list-style-type: none"> <li>Up to 10 x 2.5" SATA only</li> <li>Up to 8 x 2.5" SAS, SATA, SSD</li> <li>Up to 4 x 3.5" SAS, SATA, SSD</li> </ul>
<b>R330</b> 	1U, 1-socket entry rack server with enhanced high availability and serviceability, excellent for SMB and ROBO.	Intel Xeon processor E3-1200 v6 product family, Intel Pentium®, Intel Core™ i3, Intel Celeron®	Up to 4 DDR4 DIMMs Up to 2400MT/s	2 PCIe 3.0 + 1 slot for internal storage	2 x 1GbE	<ul style="list-style-type: none"> <li>Up to 4 x 3.5" cabled HDD plus optional 2 x 1.8" SSD cabled</li> <li>Up to 4 x 3.5" hot-swap HDD</li> <li>Up to 8 x 2.5" hot-swap HDD</li> </ul>
<b>R230</b> 	1U, 1-socket rack server delivers performance and efficiency to small businesses.	Intel Xeon processor E3-1200 v6 product family, Intel Pentium, Intel Core i3, Intel Celeron	Up to 4 DDR4 DIMMs Up to 2400MT/s	2 PCIe 3.0	2 x 1GbE	<ul style="list-style-type: none"> <li>Up to 4 x 3.5" cabled or hot-plug HDD</li> <li>Up to 4 x 2.5" HDD in hybrid drive carrier</li> </ul>

# POWEREDGE TOWER SERVERS

Platform	Description	Processor(s)	Memory	PCI slots	Embedded NICs	Hard drives
<b>T630</b> 	A high-performance 5U, 2-socket rackable tower server with a versatile mix of configuration options, performance and scalability, and massive internal storage capacity.	Intel Xeon processor E5-2600 v4 product family; up to 22 cores per socket; up to 4 GPU accelerators	Up to 24 DDR4 DIMMs Up to 2400MT/s	6 PCIe 3.0 1 PCIe 2.0	4 x 1GbE 2 x 10GbE	Up to 32 x 2.5" or 18 x 3.5" HDDs  Up to 4 optional PowerEdge Express Flash PCIe SSDs
<b>T430</b> 	Rackable 2-socket tower server delivers performance, expandability and reliability with a room to grow in a quiet office setting.	Intel Xeon processor E5-2600 v4 product family	Up to 12 DDR4 DIMMs Up to 2133MT/s	6 PCIe 3.0	2 x 1GbE LOM	Up to 4 x 3.5" cabled SAS or SATA drives, or up to 8 hot-plug 3.5" drives, or up to 16 hot-plug 2.5" SAS or SATA drives
<b>T330</b> 	Rackable 1-socket tower server delivers performance, efficiency and expandability for small businesses and organizations.	Intel Xeon processor E3-1200 v6 product family, Intel Pentium, Intel Core i3, Intel Celeron	Up to 4 DDR4 DIMMs Up to 2400MT/s	4 PCIe 3.0	2 x 1GbE	Two chassis models: <ul style="list-style-type: none"> <li>Up to 4 x 3.5" hot-swap HDD</li> <li>Up to 8 x 3.5" hot-swap HDD</li> </ul>
<b>T130</b> 	1-socket mini tower server excellent for collaboration and productivity applications in small office/home office (SOHO).	Intel Xeon processor E3-1200 v6 product family, Intel Pentium, Intel Core i3, Intel Celeron	Up to 4 DDR4 DIMMs Up to 2400MT/s	4 PCIe 3.0	2 x 1GbE	Up to 4 x 3.5" cabled HDD
<b>T30</b> 	1-socket mini tower server packs large internal storage capacity and performance to deliver efficient and worry-free operation in a small or home office.	Intel Xeon processor E3-1225 v5 product family; Intel Pentium G3220	Up to 4 DDR4 DIMMs	4 slots: 1 PCIe 3.0 x16 1 PCIe 3.0 x16 (x4speed) 1 PCIe 3.0 x4 1 PCI	Intel I219-LM GbE LAN (10/100/1000) 1 port	Up to 4 x 3.5" SATA drives plus up to 2 x 2.5" SATA drives

# POWEREDGE MODULAR INFRASTRUCTURE

## POWEREDGE FX SERIES

Individually tailored IT platform for enterprise data centers



A revolutionary design for IT platforms that integrates servers, DAS storage, networking and management in a 2U chassis to enable a workload-optimized infrastructure.

## POWEREDGE VRTX

Integrated solutions platform for remote and branch offices



A modular IT platform designed from the ground up for office environments, PowerEdge VRTX integrates servers, storage, networking and management into a single office-optimized chassis to deliver greater simplicity, efficiency and versatility.

## POWEREDGE M SERIES

Dense modular IT with central management



Designed for data centers in need of maximum density, efficiency and manageability, the PowerEdge M series integrates servers, storage, networking and management into a single chassis to deliver greater simplicity, efficiency and versatility.

## POWEREDGE C SERIES

Flexible, scale-out cloud and HPC solutions



Hyperscale-inspired shared systems capable of housing multiple server nodes, the PowerEdge C series is optimized for distributed workloads, ultra-dense scaled-out environments and cloud deployments.

# POWEREDGE FX2/FX2S CHASSIS

Chassis	Description	Power supplies	Cooling fans	I/O modules	Management modules
<b>FX2/FX2s</b> 	2U chassis houses flexible modules of IT resources — servers, DAS storage and I/O — while offering the efficiency of shared power, cooling, management and PCIe slots. The PowerEdge FX2s switched configuration supports up to 8 x low-profile PCIe 3.0 expansion slots. The unswitched FX2 configuration is a lower-cost alternative that does not have expansion slots.	Choice of up to 2 hot-pluggable power supplies	8 hot-pluggable, redundant fan modules	Up to 2 pass-through I/O modules (standard), or choice of 3 FN I/O modules (optional) for simpler cabling, east/west traffic and LAN/SAN convergence	Choice of rack or chassis management (CMC), integrated, redundant management fabric

# POWEREDGE FX SERVER NODES

Chassis	Description	Server nodes	Memory	PCIe slots	Communications	Supported drives
<b>FC830</b> 	Full-width, 4-socket server with massive memory scalability, expandable storage and powerful processing. Great for core applications and cutting-edge virtualization.	Up to 4 Intel Xeon E5-4600 v4 processors; up to 22 cores per socket	Up to 48 DDR4 DIMMs (1.5TB) Up to 2400MT/s	Access up to 4 PCIe slots; up to 8 in certain configurations	Two NDCs supporting up to 2- or 4-port 10Gb or 4-port 1Gb	Up to 8 x 2.5" HDD/SSD or 16 x 1.8" SSD
<b>FC630</b> 	Half-width 2-socket server best suited for hosting virtualization or running business intelligence applications and databases — ideal for private clouds; up to 4 in a 2U FX2 chassis.	Up to 2 Intel Xeon E5-2600 v4 processors, up to 22 cores per socket	Up to 24 DDR4 DIMMs (1.5TB) Up to 2400MT/s	Access up to 2 PCIe slots	Up to 2- or 4-port 10Gb SNA or 4-port 1Gb SNA	Up to 2 x 2.5" HDD/SSD or 8 x 1.8" SSD

# POWEREDGE FX SERVER NODES

Chassis	Description	Server nodes	Memory	PCIe slots	Communications	Supported drives
<b>FC430</b> 	An ultra-dense 2-socket, quarter-width mainstream server, ideal for distributed environments requiring multi-node reliability and efficiency, with an alternate version for low latency.	Up to 2 Intel Xeon E5-2600 v4 processors; up to 18 cores per socket	Up to 8 DDR4 DIMMS Up to 2400MT/s	Access to up to 1 PCIe slot	LOM: 2 x 10GbE or 2 x 1Gb (optional InfiniBand version)	Up to 2 x 1.8" SSD or 1 x 1.8" SSD (with an InfiniBand port)
<b>FM120x4</b> 	Half-width server block that houses 4 separate microservers and provides a high-density, low-cost solution that is ideal for web serving and dedicated hosting; up to 4 in a 2U FX2 chassis (16 servers).	Each microserver has a single Intel Atom™ C2000 processor; up to 8 cores.	Up to 2 DDR3 DIMMs Up to 1600MT/s	No PCIe support	2 x 1Gb LOMs	Up to 2 x 1.8" SSD or 1 x 2.5" HDD/SSD

# POWEREDGE FD332 STORAGE BLOCK

Chassis	Description	I/O
<b>FD332</b> 	Half-width storage block that enables up to 16 small form factor (SFF) 2.5" storage devices; up to 3 x FD332 per FX2 chassis	PowerEdge RAID Controller 9 (PERC9), pass-through I/O; single or dual SAS controllers; mix and match for dual controllers (RAID/non-RAID)

# POWEREDGE VRTX

Chassis	Description	Server nodes	Memory	PCIe slots	Networking	Supported drives
<b>VRTX</b> 	<p>Tower or 5U rackable platform that integrates up to 4 server nodes, storage, networking and management into a compact chassis optimized for office environments.</p>	<p>Up to 4 server nodes, hot-plug and serviceable</p> <p>M630 half-height, 2-socket node</p> <p>M830 full-height, 4-socket node</p>	<p>Dependent upon chosen server nodes</p>	<p>3 full-height and 5 half-length</p>	<p>1GbE internal switch module (standard) with 16 x 1GbE ports and 8 external ports</p> <p>Ethernet pass-through module with 8 external ports (optional) 10GbE (optional) and 1GbE (standard) switch modules</p>	<p>Up to 12 x hot-plug 3.5" SAS or SSD drives or up to 25 hot-plug 2.5" SAS or SSD drives. Optional FIPS 140-2 certified self-encrypting drives (SED) are available.</p>

# POWEREDGE M1000E BLADE CHASSIS

Chassis	Description	Power supplies	Cooling fans	I/O modules	Management modules
<b>M1000e</b> 	A 10U fully modular blade enclosure for up to 8 full-height, 16 half-height PowerEdge blade servers.	Choice of up to 6 hot-pluggable power supplies	9 hot-pluggable, redundant fan modules	Up to 6 I/O modules for 3 redundant fabrics with choices of pass-through, I/O Aggregators or switches	1 standard or 2 redundant Chassis Management Controllers (CMCs); optional integrated KVM switch for "crash cart" management

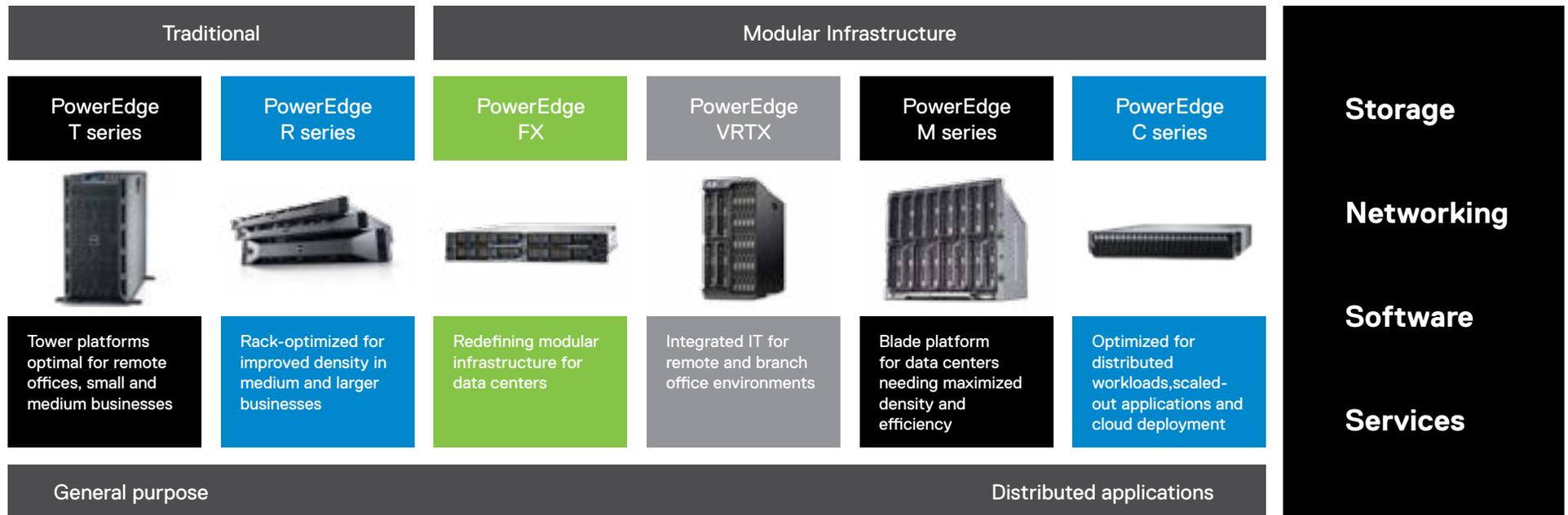
# POWEREDGE BLADE SERVERS

Platform	Description	Processor(s)	Memory	PCIe slots	Embedded NICs	Hard drives
<b>M830</b> 	Full-height, 4-socket blade server delivers exceptional performance and scalability for core business applications or consolidated environments. Up to 8 in the M1000e chassis.	Intel Xeon processor E5-4600 v4 product family; up to 22 cores per socket	Up to 48 DDR4 DIMMs Up to 2400MT/s	4 x PCIe 3.0 mezzanine I/O expansion slots	2 x quad-port modular 10GbE NIC	Up to 12 x 1.8" SSD, 4 x 2.5" SATA HDD/SSD or SAS HDD/SSD, 2 x 2.5" PCIe SSD and 2 x 2.5" SATA HDD/SSD or SAS HDD/SSD
<b>M630</b> 	Half-height 2S blade server designed for maximum performance, high density and power efficiency. Up to 16 in an M1000e chassis.	Intel Xeon processor E5-2600 v4 product family; up to 22 cores per socket	Up to 24 DDR4 DIMMs Up to 2400MT/s	2 x PCIe 3.0 mezzanine I/O expansion slots	1 x 2 or 4 port 10Gb or 4 port 1Gb modular SNA	Up to 2 hot-plug 2.5" SAS, SATA, SSD or up to 4 x 1.8" SSD drives

# POWEREDGE C SERIES

Platform	Description	Processor(s)	Memory	PCIe slots	Communications	Supported drives
<b>C6320</b> 	Ultra-dense, 4 x 2-socket independent server nodes in shared 2U chassis, optimized for HPC and scale out workloads and hyper-converged solutions.	Intel Xeon processor E5-2600 v4 product family; up to four 2-socket servers	Up to 16 DDR4 DIMMs Up to 2400MT/s	1 x16 PCIe 3.0 half-height, half-length 1 x8 PCIe 3.0 mezzanine	2x Intel 82599ES 10GbE (SFP+)  Additional 1GbE, 10GbE or InfiniBand options available	24 x 2.5" or 12 x 3.5" SASA/SATA hard drive options
<b>C4130</b> 	Purpose-built, ultra-dense 1U rack server with industry-leading GPU compute capabilities to accelerate the most demanding HPC workloads flexibly and efficiently.	Up to 2 x Intel Xeon processor E5-2600 v4 product family  Up to 4 x 300W NVIDIA Tesla GPUs or Intel coprocessors	Up to 16 DDR4 DIMMs Up to 2400MT/s	Up to 2 x low-profile PCIe 3.0 (rear)	2 x 1GbE LOM  Additional 1GbE, 10GbE, or InfiniBand options available	Up to 2 x 1.8" SATA SSD boot drives  Optional data drive tray supports up to 4 x 2.5" SAS/SATA drives

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